



**STATE OF TENNESSEE  
DEPARTMENT OF HEALTH  
ENVIRONMENTAL LABORATORIES**

TDH: Lab Services JRL  
Lab Services - Jackson Regional Lab  
Jackson, TN 38301  
731-426-0686

TDH: Lab Services KRL  
Lab Services - Knoxville Regional Lab  
Knoxville, TN 37920  
865-549-5201

TDH: Lab Services NCL  
Lab Services - Nashville Central Lab  
Nashville, TN 37243  
615-262-6300

**Sent To:** Greg Denton  
TDEC-WPC  
6th Floor, L & C Tower Annex  
401 Church Street  
Nashville, TN 37243-1534

Michael Atchley  
TDEC-WPC  
Knoxville FO  
3711 Middlebrook Pike  
Knoxville, TN 37921

**Lab ID:** K00002233  
Knoxville Regional Laboratory

**Sampling Agency:** TDEC: Division of Water Pollution Control

**Billing Code:** 327.34-20

This is to certify that the following results were determined using  
good laboratory practices and in accordance with federal or state  
approved methodologies.

  
Analytical Supervisor

**Lab-Sample Number:** K00002233001  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Trip Blank  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:**  
**Station No.:**  
**Date/Time Collected:** 03/19/2009 07:45  
**Sampler's Name:** Larry Everett  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:**  
**Date/Time Received:** 03/19/2009 13:50  
**Received By:** Ken Hitchman

**Field Determinations**

**pH:**  
**Chlorine, residual:**  
**Conductivity:**  
**Temperature:**  
**Dissolved Oxygen:**  
**Other:**  
**Flow:** CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	U	mg/L	3.8	10	M Chen	3/20/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	U	mg/L	0.7	1	M Chen	3/20/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	U	mg/L	10	10	A Peebles	3/20/2009

**J - Estimated value between MDL and MQL**  
**MDL - Method Detection Limit**  
**MQL - Method Quantitation Limit**  
**U - Undetected**

**Lab-Sample Number:** K00002233002  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Emory River mile 12.1  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 1  
**Station No.:** EMORY012.1RO  
**Date/Time Collected:** 03/19/2009 08:50  
**Sampler's Name:** Larry Everett  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:**  
**Date/Time Received:** 03/19/2009 13:50  
**Received By:** Ken Hitchman

**Field Determinations**  
**pH:** 7.19 pH Units  
**Chlorine, residual:**  
**Conductivity:** 47 uMHO  
**Temperature:** 11.13  
**Dissolved Oxygen:** 10.60 mg/L  
**Other:**  
**Flow:** CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	9.1J	mg/L	3.8	10	M Chen	3/20/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	11	mg/L	0.7	1	M Chen	3/20/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	3/20/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	U	mg/L	10	10	A Peebles	3/20/2009

**J - Estimated value between MDL and MQL**  
**MDL - Method Detection Limit**  
**MQL - Method Quantitation Limit**  
**U - Undetected**

**Lab-Sample Number:** K00002233003  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Emory River mile 2.1 Field blank  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 2  
**Station No.:** EMORY002.1RO-FB  
**Date/Time Collected:** 03/19/2009 09:47  
**Sampler's Name:** Larry Everett  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:**  
**Date/Time Received:** 03/19/2009 13:50  
**Received By:** Ken Hitchman

**Field Determinations**

**pH:**  
**Chlorine, residual:**  
**Conductivity:**  
**Temperature:**  
**Dissolved Oxygen:**  
**Other:**  
**Flow:** CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	U	mg/L	3.8	10	M Chen	3/20/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	U	mg/L	0.7	1	M Chen	3/20/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	U	mg/L	10	10	A Peeples	3/20/2009

**J - Estimated value between MDL and MQL**  
**MDL - Method Detection Limit**  
**MQL - Method Quantitation Limit**  
**U - Undetected**

**Lab-Sample Number:** K00002233004  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Emory River mile 2.1  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 2  
**Station No.:** EMORY002.1RO  
**Date/Time Collected:** 03/19/2009 09:50  
**Sampler's Name:** Larry Everett  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:**  
**Date/Time Received:** 03/19/2009 13:50  
**Received By:** Ken Hitchman

**Field Determinations**  
**pH:** 7.23 pH Units  
**Chlorine, residual:**  
**Conductivity:** 80 uMHO  
**Temperature:** 11.69  
**Dissolved Oxygen:** 11.22 mg/L  
**Other:**  
**Flow:** CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	24	mg/L	3.8	10	M Chen	3/20/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	24	mg/L	0.7	1	M Chen	3/20/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	3/20/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	57	mg/L	10	10	A Peebles	3/20/2009

**J - Estimated value between MDL and MQL**  
**MDL - Method Detection Limit**  
**MQL - Method Quantitation Limit**  
**U - Undetected**

**Lab-Sample Number:** K00002233005  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Emory River mile 2.1 duplicate  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 2  
**Station No.:** EMORY002.1RO-FD  
**Date/Time Collected:** 03/19/2009 09:52  
**Sampler's Name:** Larry Everett  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:**  
**Date/Time Received:** 03/19/2009 13:50  
**Received By:** Ken Hitchman

**Field Determinations**  
**pH:** 7.22 pH Units  
**Chlorine, residual:**  
**Conductivity:** 79 uMHO  
**Temperature:** 11.69  
**Dissolved Oxygen:** 11.22 mg/L  
**Other:**  
**Flow:** CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	24	mg/L	3.8	10	M Chen	3/20/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	25	mg/L	0.7	1	M Chen	3/20/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	3/20/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	45	mg/L	10	10	A Peeples	3/20/2009

**J - Estimated value between MDL and MQL**  
**MDL - Method Detection Limit**  
**MQL - Method Quantitation Limit**  
**U - Undetected**

**Lab-Sample Number:** K00002233006  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Ash Treatment Outfall  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:**  
**Station No.:**  
**Date/Time Collected:** 03/19/2009 10:05  
**Sampler's Name:** Larry Everett  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:**  
**Date/Time Received:** 03/19/2009 13:50  
**Received By:** Ken Hitchman

**Field Determinations**

**pH:**  
**Chlorine, residual:**  
**Conductivity:**  
**Temperature:**  
**Dissolved Oxygen:**  
**Other:**  
**Flow:** CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	29	mg/L	3.8	10	M Chen	3/20/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	46	mg/L	0.7	1	M Chen	3/20/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	3/20/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	37	mg/L	10	10	A Peebles	3/20/2009

**J - Estimated value between MDL and MQL**  
**MDL - Method Detection Limit**  
**MQL - Method Quantitation Limit**  
**U - Undetected**

**Lab-Sample Number:** K00002233007  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Emory River mile 1.7  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 3  
**Station No.:** EMORY001.7RO  
**Date/Time Collected:** 03/19/2009 10:15  
**Sampler's Name:** Larry Everett  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:**  
**Date/Time Received:** 03/19/2009 13:50  
**Received By:** Ken Hitchman

**Field Determinations**  
**pH:** 6.93 pH Units  
**Chlorine, residual:**  
**Conductivity:** 47 uMHO  
**Temperature:** 11.12  
**Dissolved Oxygen:** 11.46 mg/L  
**Other:**  
**Flow:** CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	11	mg/L	3.8	10	M Chen	3/20/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	13	mg/L	0.7	1	M Chen	3/20/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	3/20/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	U	mg/L	10	10	A Peebles	3/20/2009

**J - Estimated value between MDL and MQL**  
**MDL - Method Detection Limit**  
**MQL - Method Quantitation Limit**  
**U - Undetected**



**Lab-Sample Number:** K00002233008  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Emory River mile 0.1  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 4  
**Station No.:** EMORY000.1RO  
**Date/Time Collected:** 03/19/2009 10:25  
**Sampler's Name:** Larry Everett  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:**  
**Date/Time Received:** 03/19/2009 13:50  
**Received By:** Ken Hitchman

**Field Determinations**  
**pH:** 6.87 pH Units  
**Chlorine, residual:**  
**Conductivity:** 46 uMHO  
**Temperature:** 11.04  
**Dissolved Oxygen:** 11.52 mg/L  
**Other:**  
**Flow:** CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	8.0J	mg/L	3.8	10	M Chen	3/20/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	12	mg/L	0.7	1	M Chen	3/20/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	3/20/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	U	mg/L	10	10	A Peebles	3/20/2009

**J - Estimated value between MDL and MQL**  
**MDL - Method Detection Limit**  
**MQL - Method Quantitation Limit**  
**U - Undetected**

**Lab-Sample Number:** K00002233009  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Clinch River mile 2.3 near Hwy 70 bridge  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 5  
**Station No.:** CLINC002.3RO  
**Date/Time Collected:** 03/19/2009 10:40  
**Sampler's Name:** Larry Everett  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:**  
**Date/Time Received:** 03/19/2009 13:50  
**Received By:** Ken Hitchman

**Field Determinations**

**pH:** 7.28 pH Units  
**Chlorine, residual:**  
**Conductivity:** 138 uMHO  
**Temperature:** 11.87  
**Dissolved Oxygen:** 11.98 mg/L  
**Other:**  
**Flow:** CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	58	mg/L	3.8	10	M Chen	3/20/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	45	mg/L	0.7	1	M Chen	3/20/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	3/20/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	12	mg/L	10	10	A Peoples	3/20/2009

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected

<b>Lab-Sample Number:</b>	K00002233010	<b>Field Determinations</b>	
<b>Project Name:</b>	TVA-Ash Spill	<b>pH:</b>	7.75      pH Units
<b>Sample Description:</b>	Clinch River mile 4.5 near Sugar Grove Valley R	<b>Chlorine, residual:</b>	
<b>Sampler Project Name:</b>	TVA Ash Spill	<b>Conductivity:</b>	251      uMHO
<b>Project Site No.:</b>	6	<b>Temperature:</b>	11.56
<b>Station No.:</b>	CLINC004.5RO	<b>Dissolved Oxygen:</b>	12.78      mg/L
<b>Date/Time Collected:</b>	03/19/2009    10:50	<b>Other:</b>	
<b>Sampler's Name:</b>	Larry Everett	<b>Flow:</b>	CFS
<b>County:</b>	ROANE - 73		
<b>Sample Matrix:</b>	Water		
<b>EFO:</b>	Knoxville		
<b>Sampling Agency:</b>	TDEC-WPC		
<b>Billing Code:</b>	327.34-20		
<b>Send Report To:</b>	TDEC-WPC		
<b>Agency Invoiced:</b>	TDEC-WPC		
<b>Priority Date:</b>			
<b>Date/Time Received:</b>	03/19/2009    13:50		
<b>Received By:</b>	Ken Hitchman		

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	110	mg/L	3.8	10	M Chen	3/20/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	91	mg/L	0.7	1	M Chen	3/20/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	3/20/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	13	mg/L	10	10	A Peebles	3/20/2009

**J - Estimated value between MDL and MQL**  
**MDL - Method Detection Limit**  
**MQL - Method Quantitation Limit**  
**U - Undetected**



**STATE OF TENNESSEE  
DEPARTMENT OF HEALTH  
ENVIRONMENTAL LABORATORIES**

TDH: Lab Services JRL  
Lab Services - Jackson Regional Lab  
Jackson, TN 38301  
731-426-0686

TDH: Lab Services KRL  
Lab Services - Knoxville Regional Lab  
Knoxville, TN 37920  
865-549-5201

TDH: Lab Services NCL  
Lab Services - Nashville Central Lab  
Nashville, TN 37243  
615-262-6300

**Sent To:** Greg Denton  
TDEC-WPC  
6th Floor, L & C Tower Annex  
401 Church Street  
Nashville, TN 37243-1534

Michael Atchley  
TDEC-WPC  
Knoxville FO  
3711 Middlebrook Pike  
Knoxville, TN 37921

**Lab ID:** K00002233  
Knoxville Regional Laboratory

**Sampling Agency:** TDEC: Division of Water Pollution Control

**Billing Code:** 327.34-20

This is to certify that the following results were determined using  
good laboratory practices and in accordance with federal or state  
approved methodologies.

Analytical Supervisor

**Lab-Sample Number:** K00002233001  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Trip Blank  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:**  
**Station No.:**  
**Date/Time Collected:** 03/19/2009 07:45  
**Sampler's Name:** Larry Everett  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:**  
**Date/Time Received:** 03/19/2009 13:50  
**Received By:** Ken Hitchman

**Field Determinations**

**pH:**  
**Chlorine, residual:**  
**Conductivity:**  
**Temperature:**  
**Dissolved Oxygen:**  
**Other:**  
**Flow:** CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	03/23/2009				A Bass	3/23/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	4J	µg/L	2.9	10	A Bass	3/26/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	U	µg/L	6.4	10	M Pattanayek	3/24/2009
Antimony	U	µg/L	0.33	1	M Pattanayek	3/24/2009
Arsenic	U	µg/L	0.93	5	M Pattanayek	3/24/2009
Barium	U	µg/L	2.5	5	M Pattanayek	3/24/2009
Beryllium	U	µg/L	0.11	1	M Pattanayek	3/24/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	3/24/2009
Chromium	U	µg/L	2.0	5	M Pattanayek	3/24/2009
Cobalt	U	µg/L	0.04	1	M Pattanayek	3/24/2009
Copper	U	µg/L	0.38	1	M Pattanayek	3/24/2009
Lead	U	µg/L	0.10	1	M Pattanayek	3/24/2009
Manganese	0.78J	µg/L	0.42	1	M Pattanayek	3/24/2009
Nickel	U	µg/L	0.25	1	M Pattanayek	3/24/2009
Selenium	U	µg/L	1.3	5	M Pattanayek	3/24/2009
Silver	U	µg/L	0.03	0.25	M Pattanayek	3/24/2009
Thallium	0.19J	µg/L	0.03	1	M Pattanayek	3/24/2009
Vanadium	U	µg/L	3.4	5	M Pattanayek	3/24/2009
Zinc	U	µg/L	1.9	5	M Pattanayek	3/24/2009

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected

**Lab-Sample Number:** K00002233002  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Emory River mile 12.1  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 1  
**Station No.:** EMORY012.1RO  
**Date/Time Collected:** 03/19/2009 08:50  
**Sampler's Name:** Larry Everett  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:**  
**Date/Time Received:** 03/19/2009 13:50  
**Received By:** Ken Hitchman

**Field Determinations**  
**pH:** 7.19 pH Units  
**Chlorine, residual:**  
**Conductivity:** 47 uMHQ  
**Temperature:** 11.13  
**Dissolved Oxygen:** 10.60 mg/L  
**Other:**  
**Flow:** CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	03/23/2009				A Bass	3/23/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	200	µg/L	2.9	10	A Bass	3/26/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	110	µg/L	6.4	10	M Pattanayek	3/24/2009
Antimony	U	µg/L	0.33	1	M Pattanayek	3/24/2009
Arsenic	U	µg/L	0.93	5	M Pattanayek	3/24/2009
Barium	24	µg/L	2.5	5	M Pattanayek	3/24/2009
Beryllium	U	µg/L	0.11	1	M Pattanayek	3/24/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	3/24/2009
Chromium	U	µg/L	2.0	5	M Pattanayek	3/24/2009
Cobalt	0.30J	µg/L	0.04	1	M Pattanayek	3/24/2009
Copper	1.7	µg/L	0.38	1	M Pattanayek	3/24/2009
Lead	0.15J	µg/L	0.10	1	M Pattanayek	3/24/2009
Manganese	26	µg/L	0.42	1	M Pattanayek	3/24/2009
Nickel	0.66J	µg/L	0.25	1	M Pattanayek	3/24/2009
Selenium	U	µg/L	1.3	5	M Pattanayek	3/24/2009
Silver	U	µg/L	0.03	0.25	M Pattanayek	3/24/2009
Thallium	0.11J	µg/L	0.03	1	M Pattanayek	3/24/2009
Vanadium	U	µg/L	3.4	5	M Pattanayek	3/24/2009
Zinc	7.0	µg/L	1.9	5	M Pattanayek	3/24/2009

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected



**Lab-Sample Number:** K00002233003  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Emory River mile 2.1 Field blank  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 2  
**Station No.:** EMORY002.1RO-FB  
**Date/Time Collected:** 03/19/2009 09:47  
**Sampler's Name:** Larry Everett  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:**  
**Date/Time Received:** 03/19/2009 13:50  
**Received By:** Ken Hitchman

# Field Determinations

**pH:**  
**Chlorine, residual:**  
**Conductivity:**  
**Temperature:**  
**Dissolved Oxygen:**  
**Other:**  
**Flow:** CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	ML	ANALYZED BY:	DATE
Digestion Metals	03/23/2009				A Bass	3/23/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	ML	ANALYZED BY:	DATE
Iron	3J	µg/L	2.9	10	A Bass	3/26/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	ML	ANALYZED BY:	DATE
Aluminum	U	µg/L	6.4	10	M Pattanayek	3/24/2009
Antimony	U	µg/L	0.33	1	M Pattanayek	3/24/2009
Arsenic	U	µg/L	0.93	5	M Pattanayek	3/24/2009
Barium	U	µg/L	2.5	5	M Pattanayek	3/24/2009
Beryllium	U	µg/L	0.11	1	M Pattanayek	3/24/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	3/24/2009
Chromium	U	µg/L	2.0	5	M Pattanayek	3/24/2009
Cobalt	U	µg/L	0.04	1	M Pattanayek	3/24/2009
Copper	U	µg/L	0.38	1	M Pattanayek	3/24/2009
Lead	U	µg/L	0.10	1	M Pattanayek	3/24/2009
Manganese	0.51J	µg/L	0.42	1	M Pattanayek	3/24/2009
Nickel	U	µg/L	0.25	1	M Pattanayek	3/24/2009
Selenium	U	µg/L	1.3	5	M Pattanayek	3/24/2009
Silver	U	µg/L	0.03	0.25	M Pattanayek	3/24/2009
Thallium	0.07J	µg/L	0.03	1	M Pattanayek	3/24/2009
Vanadium	U	µg/L	3.4	5	M Pattanayek	3/24/2009
Zinc	4.2J	µg/L	1.9	5	M Pattanayek	3/24/2009

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected

**Lab-Sample Number:** K00002233004  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Emory River mile 2.1  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 2  
**Station No.:** EMORY002.1RO  
**Date/Time Collected:** 03/19/2009 09:50  
**Sampler's Name:** Larry Everett  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:**  
**Date/Time Received:** 03/19/2009 13:50  
**Received By:** Ken Hitchman

**Field Determinations**  
**pH:** 7.23 pH Units  
**Chlorine, residual:**  
**Conductivity:** 80 uMHO  
**Temperature:** 11.69  
**Dissolved Oxygen:** 11.22 mg/L  
**Other:**  
**Flow:** CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	03/23/2009				A Bass	3/23/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	1100	µg/L	2.9	10	A Bass	3/26/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	2100	µg/L	128.0	200	M Pattanayek	3/24/2009
Antimony	0.51J	µg/L	0.33	1	M Pattanayek	3/24/2009
Arsenic	10	µg/L	0.93	5	M Pattanayek	3/24/2009
Barium	81	µg/L	2.5	5	M Pattanayek	3/24/2009
Beryllium	0.39J	µg/L	0.11	1	M Pattanayek	3/24/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	3/24/2009
Chromium	2.8J	µg/L	2.0	5	M Pattanayek	3/24/2009
Cobalt	1.7	µg/L	0.04	1	M Pattanayek	3/24/2009
Copper	5.9	µg/L	0.38	1	M Pattanayek	3/24/2009
Lead	3.1	µg/L	0.10	1	M Pattanayek	3/24/2009
Manganese	73	µg/L	0.42	1	M Pattanayek	3/24/2009
Nickel	3.3	µg/L	0.25	1	M Pattanayek	3/24/2009
Selenium	U	µg/L	1.3	5	M Pattanayek	3/24/2009
Silver	U	µg/L	0.03	0.25	M Pattanayek	3/24/2009
Thallium	0.28J	µg/L	0.03	1	M Pattanayek	3/24/2009
Vanadium	11	µg/L	3.4	5	M Pattanayek	3/24/2009
Zinc	11	µg/L	1.9	5	M Pattanayek	3/24/2009

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected

**Lab-Sample Number:** K00002233005  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Emory River mile 2.1 duplicate  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 2  
**Station No.:** EMORY002.1RO-FD  
**Date/Time Collected:** 03/19/2009 09:52  
**Sampler's Name:** Larry Everett  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:**  
**Date/Time Received:** 03/19/2009 13:50  
**Received By:** Ken Hitchman

**Field Determinations**  
**pH:** 7.22 pH Units  
**Chlorine, residual:**  
**Conductivity:** 79 uMHO  
**Temperature:** 11.69  
**Dissolved Oxygen:** 11.22 mg/L  
**Other:**  
**Flow:** CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	03/23/2009				A Bass	3/23/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	1100	µg/L	2.9	10	A Bass	3/26/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	1800	µg/L	128.0	200	M Pattanayek	3/24/2009
Antimony	0.46J	µg/L	0.33	1	M Pattanayek	3/24/2009
Arsenic	9.1	µg/L	0.93	5	M Pattanayek	3/24/2009
Barium	75	µg/L	2.5	5	M Pattanayek	3/24/2009
Beryllium	0.31J	µg/L	0.11	1	M Pattanayek	3/24/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	3/24/2009
Chromium	2.6J	µg/L	2.0	5	M Pattanayek	3/24/2009
Cobalt	1.5	µg/L	0.04	1	M Pattanayek	3/24/2009
Copper	5.1	µg/L	0.38	1	M Pattanayek	3/24/2009
Lead	2.9	µg/L	0.10	1	M Pattanayek	3/24/2009
Manganese	70	µg/L	0.42	1	M Pattanayek	3/24/2009
Nickel	3.0	µg/L	0.25	1	M Pattanayek	3/24/2009
Selenium	U	µg/L	1.3	5	M Pattanayek	3/24/2009
Silver	U	µg/L	0.03	0.25	M Pattanayek	3/24/2009
Thallium	0.26J	µg/L	0.03	1	M Pattanayek	3/24/2009
Vanadium	11	µg/L	3.4	5	M Pattanayek	3/24/2009
Zinc	9.2	µg/L	1.9	5	M Pattanayek	3/24/2009

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected

**Lab-Sample Number:** K00002233006  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Ash Treatment Outfall  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:**  
**Station No.:**  
**Date/Time Collected:** 03/19/2009 10:05  
**Sampler's Name:** Larry Everett  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:**  
**Date/Time Received:** 03/19/2009 13:50  
**Received By:** Ken Hitchman

**Field Determinations**

**pH:**  
**Chlorine, residual:**  
**Conductivity:**  
**Temperature:**  
**Dissolved Oxygen:**  
**Other:**  
**Flow:** CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	03/23/2009				A Bass	3/23/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	1400	µg/L	2.9	10	A Bass	3/26/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	1800	µg/L	128.0	200	M Pattanayek	3/24/2009
Antimony	0.80J	µg/L	0.33	1	M Pattanayek	3/24/2009
Arsenic	7.6	µg/L	0.93	5	M Pattanayek	3/24/2009
Barium	210	µg/L	5.0	10	M Pattanayek	3/24/2009
Beryllium	0.46J	µg/L	0.11	1	M Pattanayek	3/24/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	3/24/2009
Chromium	8.5	µg/L	2.0	5	M Pattanayek	3/24/2009
Cobalt	3.3	µg/L	0.04	1	M Pattanayek	3/24/2009
Copper	8.8	µg/L	0.38	1	M Pattanayek	3/24/2009
Lead	3.1	µg/L	0.10	1	M Pattanayek	3/24/2009
Manganese	81	µg/L	0.42	1	M Pattanayek	3/24/2009
Nickel	6.2	µg/L	0.25	1	M Pattanayek	3/24/2009
Selenium	2.6J	µg/L	1.3	5	M Pattanayek	3/24/2009
Silver	0.30	µg/L	0.03	0.25	M Pattanayek	3/24/2009
Thallium	0.81J	µg/L	0.03	1	M Pattanayek	3/24/2009
Vanadium	32	µg/L	3.4	5	M Pattanayek	3/24/2009
Zinc	9.9	µg/L	1.9	5	M Pattanayek	3/24/2009

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected



**Lab-Sample Number:** K00002233007  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Emory River mile 1.7  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 3  
**Station No.:** EMORY001.7RO  
**Date/Time Collected:** 03/19/2009 10:15  
**Sampler's Name:** Larry Everett  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:**  
**Date/Time Received:** 03/19/2009 13:50  
**Received By:** Ken Hitchman

**Field Determinations**  
**pH:** 6.93 pH Units  
**Chlorine, residual:**  
**Conductivity:** 47 uMHO  
**Temperature:** 11.12  
**Dissolved Oxygen:** 11.46 mg/L  
**Other:**  
**Flow:** CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	03/23/2009				A Bass	3/23/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	370	µg/L	2.9	10	A Bass	3/26/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	270	µg/L	12.8	20	M Pattanayek	3/24/2009
Antimony	U	µg/L	0.33	1	M Pattanayek	3/24/2009
Arsenic	U	µg/L	0.93	5	M Pattanayek	3/24/2009
Barium	26	µg/L	2.5	5	M Pattanayek	3/24/2009
Beryllium	U	µg/L	0.11	1	M Pattanayek	3/24/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	3/24/2009
Chromium	U	µg/L	2.0	5	M Pattanayek	3/24/2009
Cobalt	0.38J	µg/L	0.04	1	M Pattanayek	3/24/2009
Copper	1.2	µg/L	0.38	1	M Pattanayek	3/24/2009
Lead	0.37J	µg/L	0.10	1	M Pattanayek	3/24/2009
Manganese	32	µg/L	0.42	1	M Pattanayek	3/24/2009
Nickel	0.80J	µg/L	0.25	1	M Pattanayek	3/24/2009
Selenium	U	µg/L	1.3	5	M Pattanayek	3/24/2009
Silver	U	µg/L	0.03	0.25	M Pattanayek	3/24/2009
Thallium	0.27J	µg/L	0.03	1	M Pattanayek	3/24/2009
Vanadium	U	µg/L	3.4	5	M Pattanayek	3/24/2009
Zinc	6.3	µg/L	1.9	5	M Pattanayek	3/24/2009

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected

**Lab-Sample Number:** K00002233008  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Emory River mile 0.1  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 4  
**Station No.:** EMORY000.1RO  
**Date/Time Collected:** 03/19/2009 10:25  
**Sampler's Name:** Larry Everett  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:**  
**Date/Time Received:** 03/19/2009 13:50  
**Received By:** Ken Hitchman

**Field Determinations**  
**pH:** 6.87 pH Units  
**Chlorine, residual:**  
**Conductivity:** 46 uMHO  
**Temperature:** 11.04  
**Dissolved Oxygen:** 11.52 mg/L  
**Other:**  
**Flow:** CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	03/23/2009				A Bass	3/23/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	370	µg/L	2.9	10	A Bass	3/26/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	270	µg/L	12.8	20	M Pattanayek	3/24/2009
Antimony	U	µg/L	0.33	1	M Pattanayek	3/24/2009
Arsenic	U	µg/L	0.93	5	M Pattanayek	3/24/2009
Barium	27	µg/L	2.5	5	M Pattanayek	3/24/2009
Beryllium	U	µg/L	0.11	1	M Pattanayek	3/24/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	3/24/2009
Chromium	2.1J	µg/L	2.0	5	M Pattanayek	3/24/2009
Cobalt	0.35J	µg/L	0.04	1	M Pattanayek	3/24/2009
Copper	1.2	µg/L	0.38	1	M Pattanayek	3/24/2009
Lead	0.37J	µg/L	0.10	1	M Pattanayek	3/24/2009
Manganese	31	µg/L	0.42	1	M Pattanayek	3/24/2009
Nickel	0.82J	µg/L	0.25	1	M Pattanayek	3/24/2009
Selenium	U	µg/L	1.3	5	M Pattanayek	3/24/2009
Silver	U	µg/L	0.03	0.25	M Pattanayek	3/24/2009
Thallium	0.15J	µg/L	0.03	1	M Pattanayek	3/24/2009
Vanadium	U	µg/L	3.4	5	M Pattanayek	3/24/2009
Zinc	7.3	µg/L	1.9	5	M Pattanayek	3/24/2009

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected

**Lab-Sample Number:** K00002233009  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Clinch River mile 2.3 near Hwy 70 bridge  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 5  
**Station No.:** CLINC002.3RO  
**Date/Time Collected:** 03/19/2009 10:40  
**Sampler's Name:** Larry Everett  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:**  
**Date/Time Received:** 03/19/2009 13:50  
**Received By:** Ken Hitchman

**Field Determinations**  
**pH:** 7.28 pH Units  
**Chlorine, residual:**  
**Conductivity:** 138 uMHO  
**Temperature:** 11.87  
**Dissolved Oxygen:** 11.98 mg/L  
**Other:**  
**Flow:** CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	03/23/2009				A Bass	3/23/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	350	µg/L	2.9	10	A Bass	3/26/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	290	µg/L	12.8	20	M Pattanayek	3/24/2009
Antimony	U	µg/L	0.33	1	M Pattanayek	3/24/2009
Arsenic	U	µg/L	0.93	5	M Pattanayek	3/24/2009
Barium	33	µg/L	2.5	5	M Pattanayek	3/24/2009
Beryllium	U	µg/L	0.11	1	M Pattanayek	3/24/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	3/24/2009
Chromium	U	µg/L	2.0	5	M Pattanayek	3/24/2009
Cobalt	0.36J	µg/L	0.04	1	M Pattanayek	3/24/2009
Copper	1.4	µg/L	0.38	1	M Pattanayek	3/24/2009
Lead	0.41J	µg/L	0.10	1	M Pattanayek	3/24/2009
Manganese	34	µg/L	0.42	1	M Pattanayek	3/24/2009
Nickel	1.1	µg/L	0.25	1	M Pattanayek	3/24/2009
Selenium	U	µg/L	1.3	5	M Pattanayek	3/24/2009
Silver	U	µg/L	0.03	0.25	M Pattanayek	3/24/2009
Thallium	0.11J	µg/L	0.03	1	M Pattanayek	3/24/2009
Vanadium	U	µg/L	3.4	5	M Pattanayek	3/24/2009
Zinc	4.2J	µg/L	1.9	5	M Pattanayek	3/24/2009

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected

<b>Lab-Sample Number:</b>	K00002233010	<b>Field Determinations</b>	
<b>Project Name:</b>	TVA-Ash Spill	<b>pH:</b>	7.75 pH Units
<b>Sample Description:</b>	Clinch River mile 4.5 near Sugar Grove Valley R	<b>Chlorine, residual:</b>	
<b>Sampler Project Name:</b>	TVA Ash Spill	<b>Conductivity:</b>	251 uMHO
<b>Project Site No.:</b>	6	<b>Temperature:</b>	11.56
<b>Station No.:</b>	CLINC004.5RO	<b>Dissolved Oxygen:</b>	12.78 mg/L
<b>Date/Time Collected:</b>	03/19/2009 10:50	<b>Other:</b>	
<b>Sampler's Name:</b>	Larry Everett	<b>Flow:</b>	CFS
<b>County:</b>	ROANE - 73		
<b>Sample Matrix:</b>	Water		
<b>EFO:</b>	Knoxville		
<b>Sampling Agency:</b>	TDEC-WPC		
<b>Billing Code:</b>	327.34-20		
<b>Send Report To:</b>	TDEC-WPC		
<b>Agency Invoiced:</b>	TDEC-WPC		
<b>Priority Date:</b>			
<b>Date/Time Received:</b>	03/19/2009 13:50		
<b>Received By:</b>	Ken Hitchman		

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	03/23/2009				A Bass	3/23/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	390	µg/L	2.9	10	A Bass	3/26/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	190	µg/L	6.4	10	M Pattanayek	3/24/2009
Antimony	U	µg/L	0.33	1	M Pattanayek	3/24/2009
Arsenic	U	µg/L	0.93	5	M Pattanayek	3/24/2009
Barium	35	µg/L	2.5	5	M Pattanayek	3/24/2009
Beryllium	U	µg/L	0.11	1	M Pattanayek	3/24/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	3/24/2009
Chromium	U	µg/L	2.0	5	M Pattanayek	3/24/2009
Cobalt	0.31J	µg/L	0.04	1	M Pattanayek	3/24/2009
Copper	1.2	µg/L	0.38	1	M Pattanayek	3/24/2009
Lead	0.37J	µg/L	0.10	1	M Pattanayek	3/24/2009
Manganese	48	µg/L	0.42	1	M Pattanayek	3/24/2009
Nickel	1.2	µg/L	0.25	1	M Pattanayek	3/24/2009
Selenium	U	µg/L	1.3	5	M Pattanayek	3/24/2009
Silver	U	µg/L	0.03	0.25	M Pattanayek	3/24/2009
Thallium	0.08J	µg/L	0.03	1	M Pattanayek	3/24/2009
Vanadium	U	µg/L	3.4	5	M Pattanayek	3/24/2009
Zinc	3.1J	µg/L	1.9	5	M Pattanayek	3/24/2009

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected



Test: Mercury	Method: EPA 245.1
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Sample Number	Result	Units	MDL	ML	Analyzed By	Date
K00002233001	U	ug/L	0.049	0.20	A. Jeffries	3/27/2009
K00002233002	0.14J	ug/L	0.049	0.20	A. Jeffries	3/27/2009
K00002233003	U	ug/L	0.049	0.20	A. Jeffries	3/27/2009
K00002233004	U	ug/L	0.049	0.20	A. Jeffries	3/27/2009
K00002233005	U	ug/L	0.049	0.20	A. Jeffries	3/27/2009
K00002233006	U	ug/L	0.049	0.20	A. Jeffries	3/27/2009
K00002233007	U	ug/L	0.049	0.20	A. Jeffries	3/27/2009
K00002233008	U	ug/L	0.049	0.20	A. Jeffries	3/27/2009
K00002233009	0.056J	ug/L	0.049	0.20	A. Jeffries	3/27/2009
K00002233010	0.079J	ug/L	0.049	0.20	A. Jeffries	3/27/2009